ABSTRACT

1　　　　　　Multiple output streams of video and/or audio data are simultaneously

2　generated from a large scale memory buffer array and sent to one or more customer

3　devices for playback.　The data is sent over networks, which use one or more

4　protocols for data communication.　Thus, for each network, a transport protocol stack

5　is generated.　The transport protocol stack is generated in hardware, thus greatly

6　improving the throughput, and increasing the number of streams that can be generated.

7　A wide data bus and wide address bus can be utilized because the protocol stack is

8　generated in hardware, so that higher throughput can be achieved from the large scale

9　memory buffer array. A plurality of protocol stack generators can have access to the

10　same block of memory, allowing many output streams to be generated from a single

11　copy of content in the large scale memory buffer array.